WEB PROGRAMS

PYTHON PROGRAMS

1. **Design a webpage containing the Programmes offered in your college with different types of headings, links and lists.**

```
<html>
<head>
<title>SSITS</title>
</head>
<body bgcolor="#F2F4CF">
<div style="background-color:white">
<center><header><font color="red"><h1>SSITS</h1>
<h2>Karimbam</h2></header></font></center></div>
<center><img src="/home/ajay/Downloads/ssits2.jpg" alt="SSITS" height="150" width="500"
border="10" style="border-color:green">
</center><br><br>
<div style="background-color:black">
<font color="white" size="5"><b>SSITS</b><i> The college is affiliated to Kannur university.It was
the first institution in Kannur university to provide such courses.</i><br><br>
<b>Along with the main stream courses the college conducts various courses.</b><font></div><br>
<a href="gallery.html"><h2>Gallery</h2></a><br>
<table width="1000" style="background-color:pink"><tr>
<td style="background-color:orange">
<h1><B>PROGRAM LIST</B></h1>
<font color="blue" size="6"><ul>
<li>BSc Computer Science</li>
<li>BCom</li>
<li>MSc Computer Science</li>
</ul></font>
</td></tr></table><br><br>
</body>
</html>
```

gallery.html

```
<html>
<body bgcolor="ivory">
<br><br><br>_____
_____
</b><br>
<img src="/home/ajay/Downloads/ssits1.jpg">
<img src="/home/ajay/Downloads/ssits2.jpg">
<img src="/home/ajay/Downloads/ssits3.jpg">
<img src="/home/ajay/Downloads/ssits4.jpg">
<br><br><br>_____
_____</b><br>
<a href="college.html" align="left">Home</a>
</body>
</html>
```

OUTPUT

SSITS

Karimbam

SSITS *The college is affiliated to Kannur university.It was the first institution in Kannur university to provide such courses.*

Along with the main stream courses the college conducts various courses.

Gallery

PROGRAM LIST

- BSc Computer Science
- BCom
- MSc Computer Science

gallery.html

Home

2. Insert an image into the webpage. Use appropriate attributes.

```
<html>
<head>
<title>Snow</title>
</head>
<body>
<br>
<caption><i>IMAGE WITH BORDER</li></caption>
<img align="center" src="snow.jpg" border="5" width="140" height="120">
</body>
</html>
```

OUTPUT

IMAGE WITH BORDER

3. Design a webpage showing the mark list of a student of B.Sc. Computer Science using Table. Use different attributes as necessary.

```
<html>
<body bgcolor="#F2F4CF">
<center><H1>Marklist</H1>
<br><br><br>
<table border="2">
<tbody><tr>
<td colspan="11"><b>Programme: BSc Computer Science<br>
Semester:Fourth Semester<br>
College:SSITS<br>
Name:AJAY</br>
</td>
</tr>
<tr>
<td>Course code</td>
<td>Course Title</td>
<td>Cr.</td>
<td>Max.Mark</td>
<td>IA</td>
<td>ESE</td>
<td>Total</td>
<td>GP</td>
<td>C.P</td>
<td>Result</td>
</tr>
<tr>
<td>4B01CSC</td>
<td>PYTHON</td>
<td>4</td>
<td>50</td>
<td>10</td>
<td>32</td>
<td>42</td>
<td>8.4</td>
<td>A</td>
<td>33.6</td>
<td>P</td>
</tr>
<tr>
<td>4B02CSC</td>
<td>WEB</td>
<td>3</td>
<td>50</td>
<td>10</td>
<td>34</td>
<td>44</td>
```

```
<td>6.6</td>
<td>C</td>
<td>26.4</td>
<td>P</td>
</tr>
<tr>
<td>4B03CSC</td>
<td>JAVA</td>
<td>4</td>
<td>50</td>
<td>9</td>
<td>24</td>
<td>33</td>
<td>6.6</td>
<td>C</td>
<td>26.4</td>
<td>P</td>
</tr>
<tr>
<td>4B04CSC</td>
<td>GRAPHICS</td>
<td>4</td>
<td>50</td>
<td>10</td>
<td>32</td>
<td>42</td>
<td>8.4</td>
<td>A</td>
<td>33.6</td>
<td>P</td>
</tr>
<tr>
<td>4B05CSC</td>
<td>OPEN</td>
<td>2</td>
<td>25</td>
<td>4</td>
<td>12</td>
<td>16</td>
<td>6.4</td>
<td>C</td>
<td>12.8</td>
<td>P</td>
</tr>
</body></table></center>
</body>
</html>
```

OUTPUT

Marklist

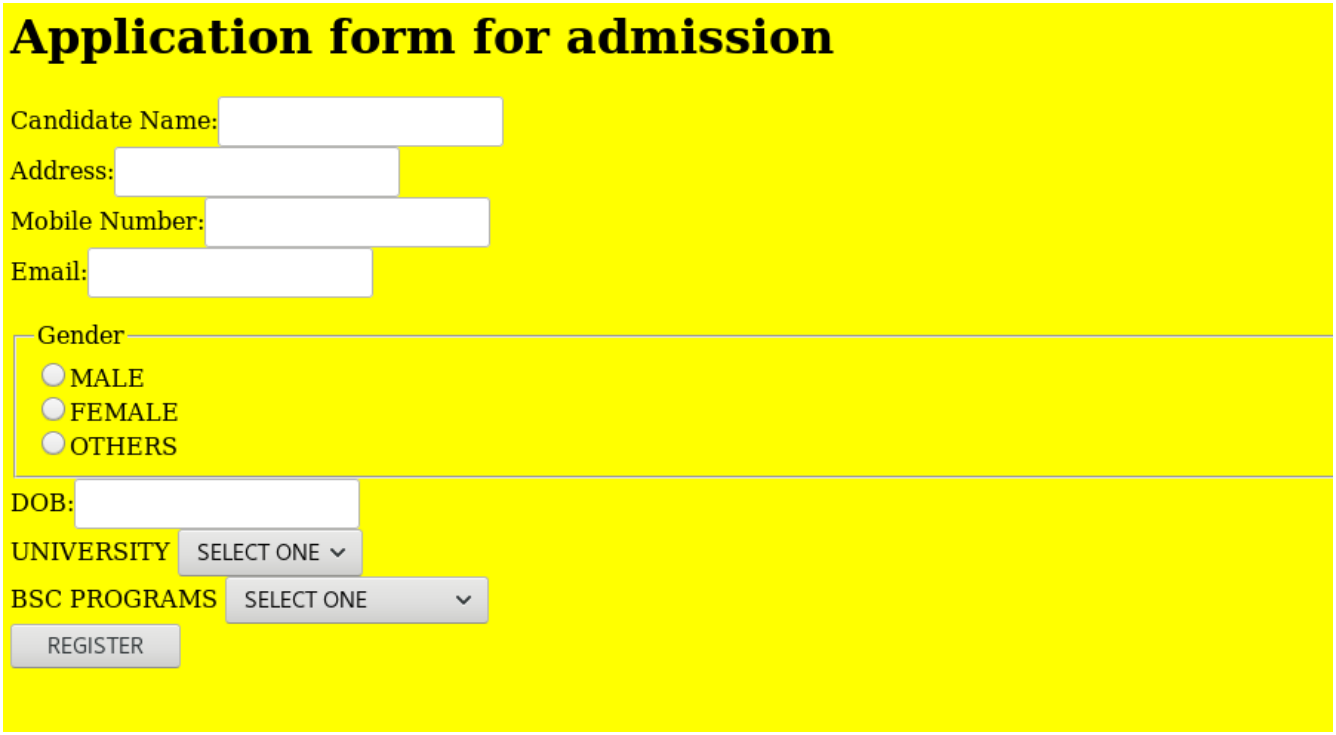
Programme: BSc Computer Science
Semester:Fourth Semester
College:SSITS
Name:AJAY

Course code	Course Title	Cr.	Max.Mark	IA	ESE	Total	GP	C.P	Result	
4B01CSC	PYTHON	4	50	10	32	42	8.4	A	33.6	P
4B02CSC	WEB	3	50	10	34	44	6.6	C	26.4	P
4B03CSC	JAVA	4	50	9	24	33	6.6	C	26.4	P
4B04CSC	GRAPHICS	4	50	10	32	42	8.4	A	33.6	P
4B05CSC	OPEN	2	25	4	12	16	6.4	C	12.8	P

4. Design an application form for admission to a course. It should contain different types of inputs. Use autocomplete attribute also.

```
<html>
<body bgcolor=" yellow">
<h1>Application form for admission</h1>
<form autocomplete="on">
<p><label>Candidate Name:<input type="text"name="name" required></label><BR>
<label>Address:<input type="text" name="address" required></label><BR>
<label>Mobile Number:<input type="text" name="number" required></label><BR>
<label>Email:<input type="email"name="email_address" required></label><BR>
<fieldset><legend>Gender</legend>
<label><input type="radio" name="gend" required>MALE</label><BR>
<label><input type="radio" name="gend" required>FEMALE</label><BR>
<label><input type="radio" name="gend" required>OTHERS</label><BR></fieldset>
<label>DOB:<input type="text" name="date" required></label><BR>
<label>UNIVERSITY
<select id="UTY" name="UNIVERSITY">
<option value="" selected="selected">SELECT ONE </option>
<option value="city">KANNUR</option>
<option value="city">KASARGODE</option></select></label><BR>
<label>BSC PROGRAMS
<select id="PGH"name="PGH">
<option value="" selected="selected">SELECT ONE </option>
<option value="sub1">COMPUTER SCIENCE</option>
</select>
</label><BR>
<label><input type="submit" value="REGISTER">
</label>
</form>
</body>
</html>
```

OUTPUT

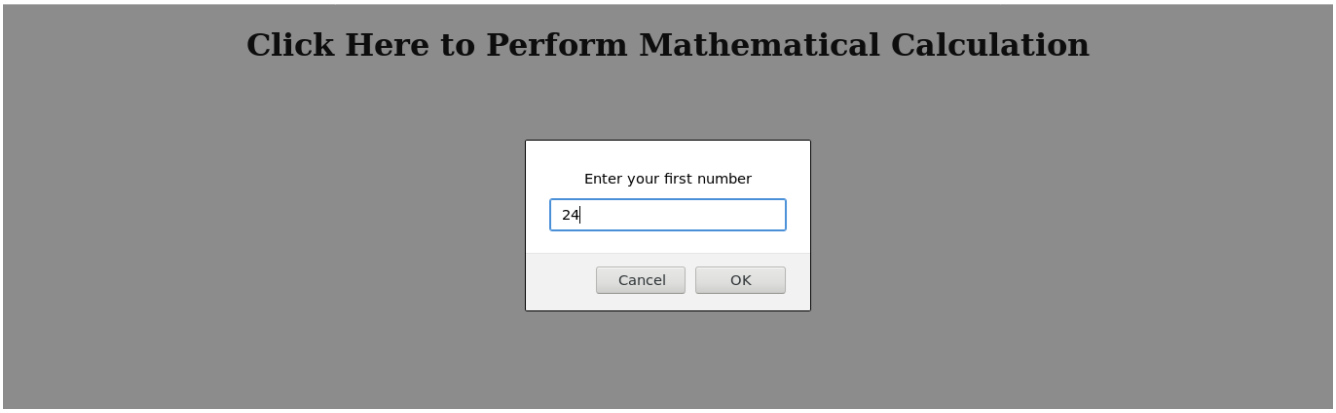

Application form for admission
Candidate Name:
Address:
Mobile Number:
Email:
Gender
MALE
FEMALE
OTHERS
DOB:
UNIVERSITY
SELECT ONE
BSC PROGRAMS
SELECT ONE
REGISTER

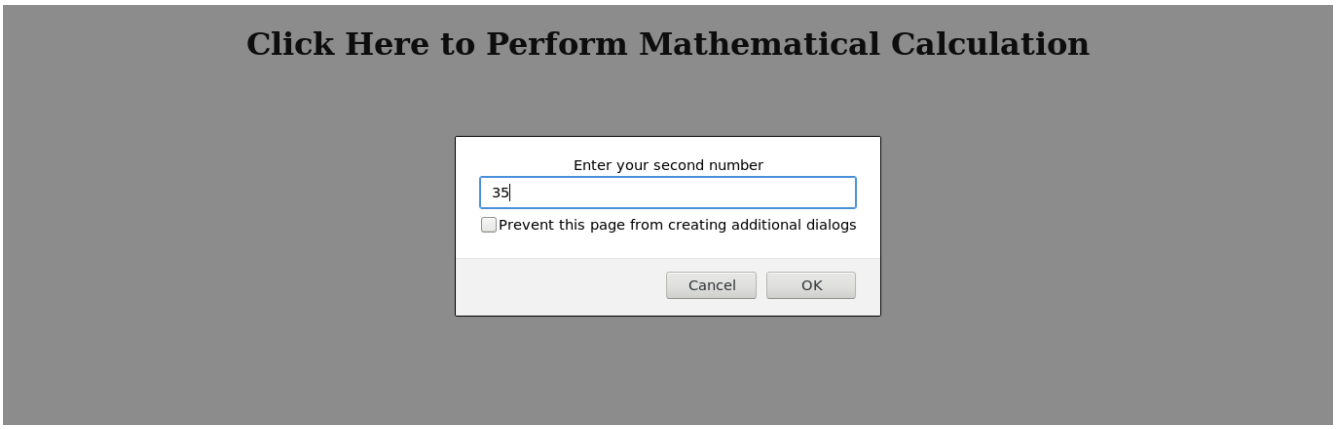
5. Write a JavaScript code using functions to perform arithmetic operations on two numbers.

```
<html>
<body>
<center>
<h1>Click Here to Perform Mathematical Calculation</h1><br>
<script>
var x=prompt("Enter your first number","Exp1");
var y=prompt("Enter your second number","Exp2");
var x1=parseInt(x);
var y1=parseInt(y);
</script>
<button onclick="plus()" >+</button>
<button onclick="minus()" >-</button>
<button onclick="star()" >*</button>
<button onclick="division()" >/</button>
<button onclick="mod()" >%</button>
<font color="Brown"><p id="demo"></p>
<script>
function plus()
{

var res=x1+y1;
document.getElementById("demo").innerHTML="RESULT ="
+res;
}
function plus()
{

var res=x1+y1;
document.getElementById("demo").innerHTML="RESULT="
+res;
}
function minus()
{

var res=x1-y1;
document.getElementById("demo").innerHTML="RESULT ="
+res;
}
function star()
{

var res=x1*y1;
document.getElementById("demo").innerHTML="RESULT ="
+res;
}
```

```
function division()
{

var res=x1/y1;
document.getElementById("demo").innerHTML="RESULT ="
+res;
}
function mod()
{

var res=x1%y1;
document.getElementById("demo").innerHTML="RESULT ="
+res;
}
</script>
</body>
</html>
```

OUTPUT





Click Here to Perform Mathematical Calculation

+ - * / %

Click Here to Perform Mathematical Calculation

+ - * / %

RESULT=59

6. Write a JavaScript code to sort and reverse array elements.

```
<html>
<head></head>
<body>
<script language="javascript">
friends=new Array(5);
friends[0]="rafna";
friends[1]="hanna";
friends[2]="fathima";
friends[3]="sumadu";
friends[4]="pamms";
document.write(friends[0]+"<br>");
document.write(friends[1]+"<br>");
document.write(friends[2]+"<br>");
document.write(friends[3]+"<br>");
document.write(friends[4]+"<br>");
join_crt=friends.join();
reverse_crt=friends.reverse();
document.write(join_crt+"<br>");
document.write(reverse_crt);
</script>
</body>
</html>
```

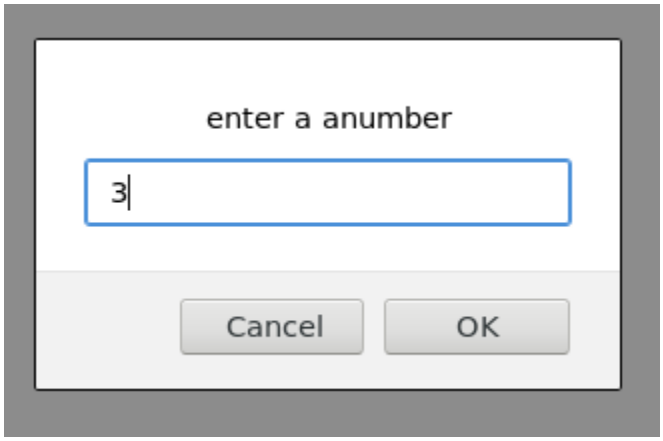
OUTPUT

```
rafna
hanna
fathima
suma
pamms
rafna,hanna,fathima,suma,pamms
pamms,suma,fathima,hanna,rafna
```

7. Java Script code to find the factorial of a number using recursion.

```
<html>
<body>
<script language="javascript">
var num=prompt("enter a anumber");
var fact=1;
while(num>0)
{
fact=fact*num;
num--;
}
document.write("factorial is "+fact);
</script>
</body>
</html>
```

OUTPUT



factorial is 6

8. Java Script code to show the working of math object. (Use at least 3 math functions)

```
<html>
<head>
<title> JavaScript Math Object</title>
</head>
<body>
<h2>JavaScript Math Object</h2>
<p id="p1" style = "color:green;"></p>
<script>document.getElementById("p1").innerHTML ="<p><b>Math.abs(-4.7):</b> " + Math.abs(-4.7) + "</p>" +"<p><b>Math.ceil(4.4):</b> " + Math.ceil(4.4) + "</p>" +"<p><b>Math.min(0, 150, 30, 20, -8, -200):</b> " +Math.min(0, 150, 30, 20, -8, -200) + "</p>" +"<p><b>Math.random():</b> " + Math.random() + "</p>";
</script>
</body>
</html>
```

OUTPUT

JavaScript Math Object

Math.abs(-4.7): 4.7

Math.ceil(4.4): 5

Math.min(0, 150, 30, 20, -8, -200): -200

Math.random(): 0.13357619878067117

9. JavaScript code to display the current Date and Time.

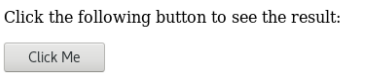
```
<html>
<body bgcolor="red">
<p>date object with the current date and time:</p>
<p id="demo"></p>
<script>
const d = new Date();
document.getElementById("demo").innerHTML = d;
</script>
</body>
</html>
```

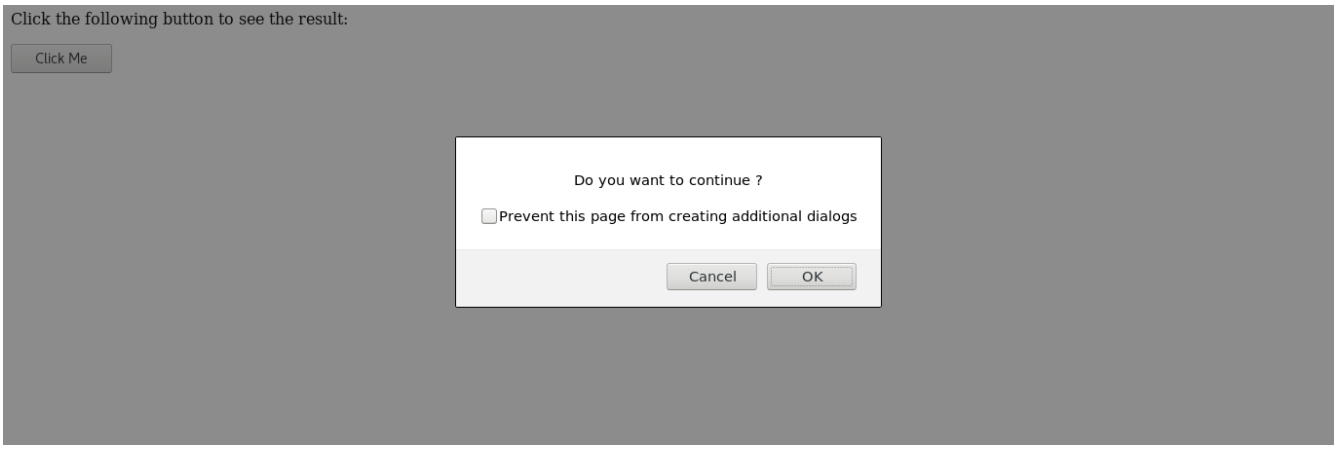
OUTPUT

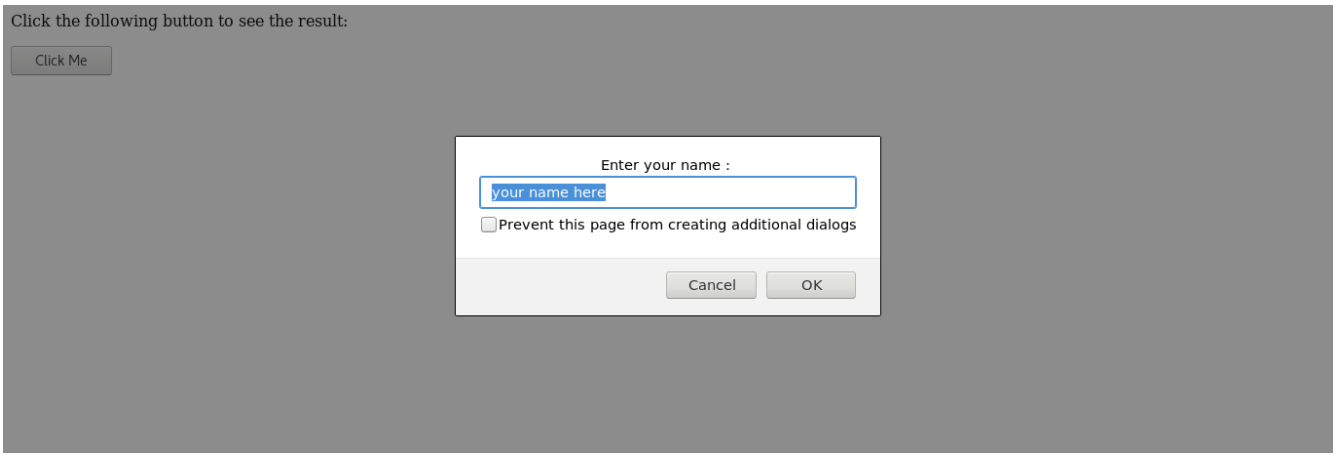
10. Java Script code to display dialogue boxes.

```
<html>
<head>
<script type = "text/javascript">
function Warn()
{
alert ("This is a warning message!");
confirm("Do you want to continue ?");
var retVal = prompt("Enter your name : ", "your name here");
document.write("This is a warning message! " + retVal);
}
</script>
</head>
<body>
<p>Click the following button to see the result: </p>
<form>
<input type = "button" value = "Click Me" onclick = "Warn();" />
</form>
</body>
</html>
```

OUTPUT







This is a warning message! your name here

Python

1. Write a program to find the largest from a list of numbers

```
def find_max(list):
    max = list[0]
for a in list:
if a > max:
            max = a
return max

num = int(input('How many numbers: '))

lst = []

for n in range(num):
    numbers = int(input('Enter numbers '))
lst.append(numbers)

print("Largest element is :", find_max(lst))
```

OUTPUT

```
How many numbers:
 3
Enter numbers
12
65
87
Largest element is: 87
```

2. Write a program to generate first n perfect numbers

```
x= int(input("Enter the limit:"))
print("\nPerfect Numbers".format(1,x))
 for Number in range(1,x):
  Sum = 0
  for n in range(1, Number - 1):
     if(Number % n == 0):
            sum = Sum + n
  if(Sum == Number):
    print("%d " %Number)
```

OUTPUT

Enter the limit:200

Perfect Numbers 6

28

3. Write a program to perform binary search

```
def binary_search(arr, low, high, x):
    If high >=low:
        mid =(high +low) //2
        if arr[mid] ==x:
            returnmid
        elifarr[mid] > x:
            returnbinary_search(arr, low, mid -1, x)
        else:
            returnbinary_search(arr, mid +1, high, x)
  else:
              return-1

arr =[ 2, 3, 4, 10, 40]
x =10
 result =binary_search(arr, 0, len(arr)-1, x)
 if result !=-1:
    print("Element is present at index", str(result))
else:
    print("Element is not present in array")
```

OUTPUT

Element is present at index 3

4. Write a program to find the square root of a number using bisection search method

```
x=25
dp = 0.01
numGuesses = 0
low = 0.0
high = x
ans = (high + low)/2.0
while abs(ans**2-x) >= dp:
    print('low = ' + str(low) + ' high = ' + str(high) + 'ans = '+ str(ans))
numGuesses += 1
    if ans**2 < x:
        low = ans
    else:
        high = ans
ans = (high + low)/2.0
print('numGuesses = '+ str(numGuesses))
```

OUTPUT

```
low = 0.0 high = 25ans = 12.5
low = 0.0 high = 12.5ans = 6.25
low = 0.0 high = 6.25ans = 3.125
low = 3.125 high = 6.25ans = 4.6875
low = 4.6875 high = 6.25ans = 5.46875
low = 4.6875 high = 5.46875ans = 5.078125
low = 4.6875 high = 5.078125ans = 4.8828125
low = 4.8828125 high = 5.078125ans = 4.98046875
low = 4.98046875 high = 5.078125ans = 5.029296875
low = 4.98046875 high = 5.029296875ans = 5.0048828125
low = 4.98046875 high = 5.0048828125ans = 4.99267578125
low = 4.99267578125 high = 5.0048828125ans = 4.998779296875
low = 4.998779296875 high = 5.0048828125ans = 5.0018310546875
numGuesses = 13
5.00030517578125 is close to square root of 25
```

5. Write a program to generate Fibonacci series using recursion

```
def fib(n):
  a = 0
  b = 1
  if n == 1:
    print(a)
 else:
   print(a)
   print(b)
   for i in range(2,n):
      c = a + b
      a = b
      b = c
      print(c)
fib(10)
```

OUTPUT

```
0
1
1
2
3
5
8
13
21
34
```

6. Write a program to find LCM and GCD of 2 numbers

```
print("Enter Two Numbers: ", end="")
no = int(input())
nt = int(input())
a = no
b = nt
while b!=0:
    temp = b
    b = a%b
    a = temp
gcd = a
lcm = int((no*nt)/gcd)

print("\nLCM (" + str(no) + ", " + str(nt) + ") = ", lcm)
print("\nGCD (" + str(no) + ", " + str(nt) + ") = ", gcd)
```

OUTPUT

```
Enter Two Numbers: 21 14

LCM (21, 14) =  42

GCD (21, 14) = 7
```

7. Write a program to perform merge sort

```
def merge_sort(alist, start, end):
    '''Sorts the list from indexes start to end - 1 inclusive.''' if end - start > 1:
        mid = (start + end)//2
        merge_sort(alist, start, mid)
        merge_sort(alist, mid, end)
        merge_list(alist, start, mid, end)

def merge_list(alist, start, mid, end):
   left = alist[start:mid]
   right = alist[mid:end]
   k = start
   i = 0
   j = 0
    while (start + i < mid and mid + j < end):
        if (left[i] <= right[j]):
        alist[k] = left[i]
        i = i + 1
        else:
            alist[k] = right[j]
            j = j + 1
            k = k + 1
    if start + i < mid:
        while k < end:
            alist[k] = left[i]
            i = i + 1
            k = k + 1
  else:
        while k < end: alist[k] = right[j] j = j + 1
        k = k + 1

alist = input('Enter the list of numbers: ').split()
 alist = [int(x) for x in alist]
merge_sort(alist, 0, len(alist))
print('Sorted list: ', end='')
print(alist)
```

OUTPUT:

```
Enter the list of numbers: 7 87 56 34 23 1 9 8
Sorted list: [1, 7, 8, 9, 23, 34, 56, 87]
```

8. Write a program which reads the contents of a file and copy the contents to another file after changing all lowercase letters to uppercase. Exceptions should be handled

```
try:
f1 = open("example.txt", "r")
f2 = open("result.txt", "w")
for line in f1:
        s=line.upper()
print(s)
f2.write(s)
f1.close()
f2.close()
except FileNotFoundError as error:
        print("Found an error=",error)
```

OUTPUT

HAI WELCOME TO PYTHON PROGRAMMING

9. Write a program to find the prime numbers in a list of numbers

```
lower =int(input("Enter the lower number"))
upper =int(input("Enter upper number"))

print("Prime numbers between", lower, "and", upper, "are:")

for numin range(lower, upper + 1):
# all prime numbers are greater than 1
   if num>1:
  for iin range(2, num):
     if (num % i) == 0:
        break
    else:
print(num)
```

OUTPUT

```
Enter the lower number1
Enter upper number10
Prime numbers between 1 and 10 are:
2
3
5
7
```

10. Write a python program to perform the following

a) create table students with fields name, sex, rollno, marks

b) insert some rows into the table

c) update the marks of all students by adding 2 marks

d) delete a student with a given rollno

e) display the details of a student with a given rollno

a) create table students with fields name,sex.rollno.marks

```
import pymysql db=pymysql.connect(host='localhost',user='root',password='redhat',datab ase='stud')

cursor=db.cursor()

sql=" " " create table student(rollno int,sname char(20),sex char(20),marks int)"""
cursor=execute(sql) db.commit()
db.close()
```

b) insert some rows into the table

```
import pymysql db=pymysql.connect(host='localhost',user='root',password='redhat',datab ase='stud')

cursor=db.cursor() sql=" " " insert into

student(rollno,sname,sex,marks)values(1,'nimi','female',50)""" sql1=" " " insert into stu-
dent(rollno,sname,sex,marks)values(2,'delna','female',49)""" cursor.execute(sql)

cursor.execute(sql1) db.commit()
db.close()
```

c) update the marks of all students by adding 2 marks

```
import pymysql db=pymysql.connect(host='localhost',user='root',password='redhat',datab ase='stud')
cursor=db.cursor()
sql=" " " update student set mark=mark+2""" cursor=execute(sql)

db.commit() db.close()
```

d) delete a student with a given rollno

```
import pymysql db=pymysql.connect(host='localhost',user='root',password='redhat',datab ase='stud')

cursor=db.cursor()

        sql=" " " delete from student where rollno=2""" cursor=exe-
        cute(sql)

        db.commit() db.close()
```

e) display the details of a student with a given rollno

```
import pymysql db=pymysql.connect(host='localhost',user='root',password='redhat',datab ase='stud')

        cursor=db.cursor()

        sql=" " " select * from student where rollno=2""" cursor=execute(sql)
        db.commit() db.close()
```